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SAA-

(See SPECIAL ACTIVITY AIRSPACE.)

SAFETY ALERT- A safety alert issued by ATC to aircraft under their control if ATC is aware the aircraft is at an altitude which, in the controller's judgment, places the aircraft in unsafe proximity to terrain, obstructions, or other aircraft. The controller may discontinue the issuance of further alerts if the pilot advises he is taking action to correct the situation or has the other aircraft in sight.

a. Terrain/Obstruction Alert- A safety alert issued by ATC to aircraft under their control if ATC is aware the aircraft is at an altitude which, in the controller's judgment, places the aircraft in unsafe proximity to terrain/obstructions; e.g., "Low Altitude Alert, check your altitude immediately."

b. Aircraft Conflict Alert- A safety alert issued by ATC to aircraft under their control if ATC is aware of an aircraft that is not under their control at an altitude which, in the controller's judgment, places both aircraft in unsafe proximity to each other. With the alert, ATC will offer the pilot an alternate course of action when feasible; e.g., "Traffic Alert, advise you turn right heading zero nine zero or climb to eight thousand immediately."

The issuance of a safety alert is contingent upon the capability of the controller to have an awareness of an unsafe condition. The course of action provided will be predicated on other traffic under ATC control. Once the alert is issued, it is solely the pilot's prerogative to determine what course of action, if any, he will take.

SAIL BACK- A maneuver during high wind conditions (usually with power off) where float plane movement is controlled by water rudders/opening and closing cabin doors.

SAME DIRECTION AIRCRAFT- Aircraft are operating in the same direction when:

a. They are following the same track in the same direction; or

b. Their tracks are parallel and the aircraft are flying in the same direction; or

c. Their tracks intersect at an angle of less than 45 degrees.

SAR-

(See SEARCH AND RESCUE.)

SAY AGAIN- Used to request a repeat of the last transmission. Usually specifies transmission or portion thereof not understood or received; e.g., "Say again all after ABRAM VOR."

SAY ALTITUDE- Used by ATC to ascertain an aircraft's specific altitude/flight level. When the aircraft is climbing or descending, the pilot should state the indicated altitude rounded to the nearest 100 feet.

SAY HEADING- Used by ATC to request an aircraft heading. The pilot should state the actual heading of the aircraft.

SDF-

(See SIMPLIFIED DIRECTIONAL FACILITY.)

SEA LANE- A designated portion of water outlined by visual surface markers for and intended to be used by aircraft designed to operate on water.

SEARCH AND RESCUE- A service which seeks missing aircraft and assists those found to be in need of assistance. It is a cooperative effort using the facilities and services of available Federal, state and local agencies. The U.S. Coast Guard is responsible for coordination of search and rescue for the Maritime Region, and the U.S. Air Force is responsible for search and rescue for the Inland Region. Information pertinent to search and rescue should be passed through any air traffic facility or be transmitted directly to the Rescue Coordination Center by telephone.

(See FLIGHT SERVICE STATION.)

(See RESCUE COORDINATION CENTER.)

(Refer to AIM.)

SEARCH AND RESCUE FACILITY- A facility responsible for maintaining and operating a search and rescue (SAR) service to render aid to persons and property in distress. It is any SAR unit, station, NET, or other operational activity which can be usefully employed during an SAR Mission; e.g., a Civil Air Patrol Wing, or a Coast Guard Station.

(See SEARCH AND RESCUE.)

SECTIONAL AERONAUTICAL CHARTS-

(See AERONAUTICAL CHART.)

SECTOR LIST DROP INTERVAL- A parameter number of minutes after the meter fix time when arrival aircraft will be deleted from the arrival sector list.

SEE AND AVOID- When weather conditions permit, pilots operating IFR or VFR are required to observe and maneuver to avoid other aircraft. Right-of-way rules are contained in FAR Part 91.

SEGMENTED CIRCLE- A system of visual indicators designed to provide traffic pattern information at airports without operating control towers.

(Refer to AIM.)

SEGMENTS OF AN INSTRUMENT APPROACH PROCEDURE- An instrument approach procedure may have as many as four separate segments depending on how the approach procedure is structured.

a. Initial Approach- The segment between the initial approach fix and the intermediate fix or the point where the aircraft is established on the intermediate course or final approach course.

(See ICAO term INITIAL APPROACH SEGMENT.)

b. Intermediate Approach- The segment between the intermediate fix or point and the final approach fix.

(See ICAO term INTERMEDIATE APPROACH SEGMENT.)

c. Final Approach- The segment between the final approach fix or point and the runway, airport, or missed approach point.

(See ICAO term FINAL APPROACH SEGMENT.)

d. Missed Approach- The segment between the missed approach point or the point of arrival at decision height and the missed approach fix at the prescribed altitude.

(Refer to FAR Part 97.)

(See ICAO term MISSED APPROACH PROCEDURE.)

SELECTED GROUND DELAYS- A traffic management procedure whereby selected flights are issued ground delays to better regulate traffic flows over a particular fix or area.

SEPARATION- In air traffic control, the spacing of aircraft to achieve their safe and orderly movement in flight and while landing and taking off.

(See SEPARATION MINIMA.)

(See ICAO term SEPARATION.)

SEPARATION [ICAO]- Spacing between aircraft, levels or tracks.

SEPARATION MINIMA- The minimum longitudinal, lateral, or vertical distances by which aircraft are spaced through the application of air traffic control procedures.

(See SEPARATION.)

SERVICE- A generic term that designates functions or assistance available from or rendered by air traffic control. For example, Class C service would denote the ATC services provided within a Class C airspace area.

SEVERE WEATHER AVOIDANCE PLAN- An approved plan to minimize the affect of severe weather on traffic flows in impacted terminal and/or ARTCC areas. SWAP is normally implemented to provide the least disruption to the ATC system when flight through portions of airspace is difficult or impossible due to severe weather.

SEVERE WEATHER FORECAST ALERTS- Preliminary messages issued in order to alert users that a Severe Weather Watch Bulletin (WW) is being issued. These messages define areas of possible severe thunderstorms or tornado activity. The messages are unscheduled and issued as required by the National Severe Storm Forecast Center at Kansas City, Missouri.

(See AIRMET.)

(See SIGMET.)

(See CONVECTIVE SIGMET.)

(See CWA.)

SFA-

(See SINGLE FREQUENCY APPROACH.)

SFO-

(See SIMULATED FLAMEOUT.)

SHF-

(See SUPER HIGH FREQUENCY.)

SHORT RANGE CLEARANCE- A clearance issued to a departing IFR flight which authorizes IFR flight to a specific fix short of the destination while air traffic control facilities are coordinating and obtaining the complete clearance.

SHORT TAKEOFF AND LANDING AIRCRAFT AIRCRAFT- An aircraft which, at some weight within its approved operating weight, is capable of operating from a STOL runway in compliance with the applicable STOL characteristics, airworthiness, operations, noise, and pollution standards.

(See VERTICAL TAKEOFF AND LANDING AIRCRAFT.)

SIAP-

(See STANDARD INSTRUMENT APPROACH PROCEDURE.)

SIDESTEP MANEUVER- A visual maneuver accomplished by a pilot at the completion of an instrument approach to permit a straight-in landing on a parallel runway not more than 1,200 feet to either side of the runway to which the instrument approach was conducted.

(Refer to AIM.)

SIGMET- A weather advisory issued concerning weather significant to the safety of all aircraft. SIGMET advisories cover severe and extreme turbulence, severe icing, and widespread dust or sandstorms that reduce visibility to less than 3 miles.

(See AIRMET.)

(See AWW.)

(See CONVECTIVE SIGMET.)

(See CWA.)

(See ICAO term SIGMET INFORMATION.)

(Refer to AIM.)

SIGMET INFORMATION [ICAO]- Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

SIGNIFICANT METEOROLOGICAL INFORMATION-

(See SIGMET.)

SIGNIFICANT POINT- A point, whether a named intersection, a NAVAID, a fix derived from a NAVAID(s), or geographical coordinate expressed in degrees of latitude and longitude, which is established for the purpose of providing separation, as a reporting point, or to delineate a route of flight.

SIMPLIFIED DIRECTIONAL FACILITY- A NAVAID used for nonprecision instrument approaches. The final approach course is similar to that of an ILS localizer except that the SDF course may be offset from the runway, generally not more than 3 degrees, and the course may be wider than the localizer, resulting in a lower degree of accuracy.

(Refer to AIM.)

SIMULATED FLAMEOUT- A practice approach by a jet aircraft (normally military) at idle thrust to a runway. The approach may start at a runway (high key) and may continue on a relatively high and wide downwind leg with a continuous turn to final. It terminates in landing

or low approach. The purpose of this approach is to simulate a flameout.

(See FLAMEOUT.)

SIMULTANEOUS ILS APPROACHES- An approach system permitting simultaneous ILS/MLS approaches to airports having parallel runways separated by at least 4,300 feet between centerlines. Integral parts of a total system are ILS/MLS, radar, communications, ATC procedures, and appropriate airborne equipment.

(See PARALLEL RUNWAYS.)

(Refer to AIM.)

SIMULTANEOUS MLS APPROACHES-

(See SIMULTANEOUS ILS APPROACHES.)

SINGLE DIRECTION ROUTES- Preferred IFR Routes which are sometimes depicted on high altitude en route charts and which are normally flown in one direction only.

(See PREFERRED IFR ROUTES.)

(Refer to AIRPORT/FACILITY DIRECTORY.)

SINGLE FREQUENCY APPROACH- A service provided under a letter of agreement to military single-piloted turbojet aircraft which permits use of a single UHF frequency during approach for landing. Pilots will not normally be required to change frequency from the beginning of the approach to touchdown except that pilots conducting an en route descent are required to change frequency when control is transferred from the air route traffic control center to the terminal facility. The abbreviation "SFA" in the DOD FLIP IFR Supplement under "Communications" indicates this service is available at an aerodrome.

SINGLE-PILOTED AIRCRAFT- A military turbojet aircraft possessing one set of flight controls, tandem cockpits, or two sets of flight controls but operated by one pilot is considered single-piloted by ATC when determining the appropriate air traffic service to be applied.

(See SINGLE FREQUENCY APPROACH.)

SLASH- A radar beacon reply displayed as an elongated target.

SLDI-

(See SECTOR LIST DROP INTERVAL.)

SLOT TIME-

(See METER FIX TIME/SLOT TIME.)

SLOW TAXI- To taxi a float plane at low power or low RPM.

SN-

(See SYSTEM STRATEGIC NAVIGATION.)

SPEAK SLOWER- Used in verbal communications as a request to reduce speech rate.

SPECIAL ACTIVITY AIRSPACE (SAA)- Any airspace with defined dimensions within the National Airspace System wherein limitations may be imposed upon aircraft operations. This airspace may be restricted areas, prohibited areas, military operations areas, air ATC assigned airspace, and any other designated airspace areas. The dimensions of this airspace are programmed into URET CCLD and can be designated as either active or inactive by screen entry. Aircraft trajectories are constantly tested against the dimensions of active areas and alerts issued to the applicable sectors when violations are predicted.

(See USER REQUEST EVALUATION TOOL CORE CAPABILITY LIMITED DEPLOYMENT.)

SPECIAL EMERGENCY- A condition of air piracy or other hostile act by a person(s) aboard an aircraft which threatens the safety of the aircraft or its passengers.

SPECIAL INSTRUMENT APPROACH PROCEDURE-

(See INSTRUMENT APPROACH PROCEDURE.)

SPECIAL USE AIRSPACE- Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Types of special use airspace are:

a. Alert Area- Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft. Alert Areas are depicted on aeronautical charts for the information of nonparticipating pilots. All activities within an Alert Area are conducted in accordance with Federal Aviation Regulations, and pilots of participating aircraft as well as pilots transiting the area are equally responsible for collision avoidance.

b. Controlled Firing Area- Airspace wherein activities are conducted under conditions so controlled as to eliminate hazards to nonparticipating aircraft and to ensure the safety of persons and property on the ground.

c. Military Operations Area (MOA)- A MOA is airspace established outside of Class A airspace area to separate or segregate certain nonhazardous military activities from IFR traffic and to identify for VFR traffic where these activities are conducted.

(Refer to AIM.)

d. Prohibited Area- Airspace designated under part 73 within which no person may operate an aircraft without the permission of the using agency.

(Refer to En Route Charts, AIM.)

e. Restricted Area- Airspace designated under FAR Part 73, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Most restricted areas are designated joint use and IFR/VFR operations in the area may be authorized by the controlling ATC facility when it is not being utilized by the using agency. Restricted areas are depicted on en route charts. Where joint use is authorized, the name of the ATC controlling facility is also shown.

(Refer to FAR Part 73.)

(Refer to AIM.)

f. Warning Area- A warning area is airspace of defined dimensions extending from 3 nautical miles outward from the coast of the United States, that contains activity that may be hazardous to nonparticipating aircraft. The purpose of such warning area is to warn nonparticipating pilots of the potential danger. A warning area may be located over domestic or international waters or both.

SPECIAL VFR CONDITIONS- Meteorological conditions that are less than those required for basic VFR flight in Class B, C, D, or E surface areas and in which some aircraft are permitted flight under visual flight rules.

(See SPECIAL VFR OPERATIONS.)

(Refer to FAR Part 91.)

SPECIAL VFR FLIGHT [ICAO]- A VFR flight cleared by air traffic control to operate within Class B, C, D, and E surface areas in metrological conditions below VMC.

SPECIAL VFR OPERATIONS- Aircraft operating in accordance with clearances within Class B, C, D, and E surface areas in weather conditions less than the basic VFR weather minima. Such operations must be requested by the pilot and approved by ATC.

(See SPECIAL VFR CONDITIONS.)

(See ICAO term SPECIAL VFR FLIGHT.)

SPEED-

(See AIRSPEED.)

(See GROUND SPEED.)

SPEED ADJUSTMENT- An ATC procedure used to request pilots to adjust aircraft speed to a specific value for the purpose of providing desired spacing. Pilots are expected to maintain a speed of plus or minus 10 knots

or 0.02 Mach number of the specified speed. Examples of speed adjustments are:

- a. "Increase/reduce speed to Mach point (number.)"
- b. "Increase/reduce speed to (speed in knots)" or "Increase/reduce speed (number of knots) knots."

SPEED BRAKES- Moveable aerodynamic devices on aircraft that reduce airspeed during descent and landing.

SPEED SEGMENTS- Portions of the arrival route between the transition point and the vertex along the optimum flight path for which speeds and altitudes are specified. There is one set of arrival speed segments adapted from each transition point to each vertex. Each set may contain up to six segments.

SQUAWK (Mode, Code, Function)- Activate specific modes/codes/functions on the aircraft transponder; e.g., "Squawk three/alpha, two one zero five, low."

(See TRANSPONDER.)

STAGING/QUEUING- The placement, integration, and segregation of departure aircraft in designated movement areas of an airport by departure fix, EDCT, and/or restriction.

STANDARD INSTRUMENT APPROACH PROCEDURE-

(See INSTRUMENT APPROACH PROCEDURE.)

STANDARD RATE TURN- A turn of three degrees per second.

STANDARD TERMINAL ARRIVAL- A preplanned instrument flight rule (IFR) air traffic control arrival procedure published for pilot use in graphic and/or textual form. STAR's provide transition from the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.

STANDARD TERMINAL ARRIVAL CHARTS-

(See AERONAUTICAL CHART.)

STAND BY- Means the controller or pilot must pause for a few seconds, usually to attend to other duties of a higher priority. Also means to wait as in "stand by for clearance." The caller should reestablish contact if a delay is lengthy. "Stand by" is not an approval or denial.

STAR-

(See STANDARD TERMINAL ARRIVAL.)

STATE AIRCRAFT- Aircraft used in military, customs and police service, in the exclusive service of any government, or of any political subdivision, thereof including the government of any state, territory, or possession of the United States or the District of

Columbia, but not including any government-owned aircraft engaged in carrying persons or property for commercial purposes.

STATIC RESTRICTIONS- Those restrictions that are usually not subject to change, fixed, in place, and/or published.

STATIONARY RESERVATIONS- Altitude reservations which encompass activities in a fixed area. Stationary reservations may include activities, such as special tests of weapons systems or equipment, certain U.S. Navy carrier, fleet, and anti-submarine operations, rocket, missile and drone operations, and certain aerial refueling or similar operations.

STEPDOWN FIX- A fix permitting additional descent within a segment of an instrument approach procedure by identifying a point at which a controlling obstacle has been safely overflown.

STEP TAXI- To taxi a float plane at full power or high RPM.

STEP TURN- A maneuver used to put a float plane in a planing configuration prior to entering an active sea lane for takeoff. The STEP TURN maneuver should only be used upon pilot request.

STEREO ROUTE- A routinely used route of flight established by users and ARTCC's identified by a coded name; e.g., ALPHA 2. These routes minimize flight plan handling and communications.

STOL AIRCRAFT-

(See SHORT TAKEOFF AND LANDING AIRCRAFT.)

STOP ALTITUDE SQUAWK- Used by ATC to inform an aircraft to turn-off the automatic altitude reporting feature of its transponder. It is issued when the verbally reported altitude varies 300 feet or more from the automatic altitude report.

(See ALTITUDE READOUT.)

(See TRANSPONDER.)

STOP AND GO- A procedure wherein an aircraft will land, make a complete stop on the runway, and then commence a takeoff from that point.

(See LOW APPROACH.)

(See OPTION APPROACH.)

STOP BURST-

(See STOP STREAM.)

STOP BUZZER-

(See STOP STREAM.)

STOPOVER FLIGHT PLAN- A flight plan format which permits in a single submission the filing of a

sequence of flight plans through interim full-stop destinations to a final destination.

STOP SQUAWK (Mode or Code)- Used by ATC to tell the pilot to turn specified functions of the aircraft transponder off.

(See STOP ALTITUDE SQUAWK.)

(See TRANSPONDER.)

STOP STREAM- Used by ATC to request a pilot to suspend electronic countermeasure activity.

(See JAMMING.)

STOPWAY- An area beyond the takeoff runway no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff.

STRAIGHT-IN APPROACH IFR- An instrument approach wherein final approach is begun without first having executed a procedure turn, not necessarily completed with a straight-in landing or made to straight-in landing minimums.

(See STRAIGHT-IN LANDING.)

(See LANDING MINIMUMS.)

(See STRAIGHT-IN APPROACH VFR.)

STRAIGHT-IN APPROACH VFR- Entry into the traffic pattern by interception of the extended runway centerline (final approach course) without executing any other portion of the traffic pattern.

(See TRAFFIC PATTERN.)

STRAIGHT-IN LANDING- A landing made on a runway aligned within 30° of the final approach course following completion of an instrument approach.

(See STRAIGHT-IN APPROACH-IFR.)

STRAIGHT-IN LANDING MINIMUMS-

(See LANDING MINIMUMS.)

STRAIGHT-IN MINIMUMS-

(See STRAIGHT-IN LANDING MINIMUMS.)

STRATEGIC PLANNING- Planning whereby solutions are sought to resolve potential conflicts.

SUBSTITUTIONS- Users are permitted to exchange CTA's. Normally, the airline dispatcher will contact the ATCSCC with this request. The ATCSCC shall forward approved substitutions to the TMU's who will notify the appropriate terminals. Permissible swapping must

not change the traffic load for any given hour of an EQF program.

SUBSTITUTE ROUTE- A route assigned to pilots when any part of an airway or route is unusable because of NAVAID status. These routes consist of:

a. Substitute routes which are shown on U.S. Government charts.

b. Routes defined by ATC as specific NAVAID radials or courses.

c. Routes defined by ATC as direct to or between NAVAID's.

SUNSET AND SUNRISE- The mean solar times of sunset and sunrise as published in the Nautical Almanac, converted to local standard time for the locality concerned. Within Alaska, the end of evening civil twilight and the beginning of morning civil twilight, as defined for each locality.

SUPER HIGH FREQUENCY- The frequency band between 3 and 30 gigahertz (GHz). The elevation and azimuth stations of the microwave landing system operate from 5031 MHz to 5091 MHz in this spectrum.

SUPPLEMENTAL WEATHER SERVICE LOCATION- Airport facilities staffed with contract personnel who take weather observations and provide current local weather to pilots via telephone or radio. (All other services are provided by the parent FSS).

SUPPS- Refers to ICAO Document 7030 Regional Supplementary Procedures. SUPPS contain procedures for each ICAO Region which are unique to that Region and are not covered in the worldwide provisions identified in the ICAO Air Navigation Plan. Procedures contained in chapter 8 are based in part on those published in SUPPS.

SURFACE AREA- The airspace contained by the lateral boundary of the Class B, C, D, or E airspace designated for an airport that begins at the surface and extends upward.

SURPIC- A description of surface vessels in the area of a Search and Rescue incident including their predicted positions and their characteristics.

(See FAAO 7110.65, Para 10-6-4, *INFLIGHT CONTINGENCIES*.)

SURVEILLANCE APPROACH- An instrument approach wherein the air traffic controller issues instructions, for pilot compliance, based on aircraft position in relation to the final approach course (azimuth), and the distance (range) from the end of the runway as displayed on the controller's radar scope. The controller

will provide recommended altitudes on final approach if requested by the pilot.

(Refer to AIM.)

SWAP-

(See SEVERE WEATHER AVOIDANCE PLAN.)

SWSL-

(See SUPPLEMENTAL WEATHER SERVICE

LOCATION.)

SYSTEM STRATEGIC NAVIGATION- Military activity accomplished by navigating along a preplanned route using internal aircraft systems to maintain a desired track. This activity normally requires a lateral route width of 10 NM and altitude range of 1,000 feet to 6,000 feet AGL with some route segments that permit terrain following.